South Treatment Plant Odor Control Systems

Dirk Apgar, PE, PMP
King County – WTD
206.684.1769
dirk.apgar@kingcounty.gov





Wet Chemical Scrubber Cut-Away View

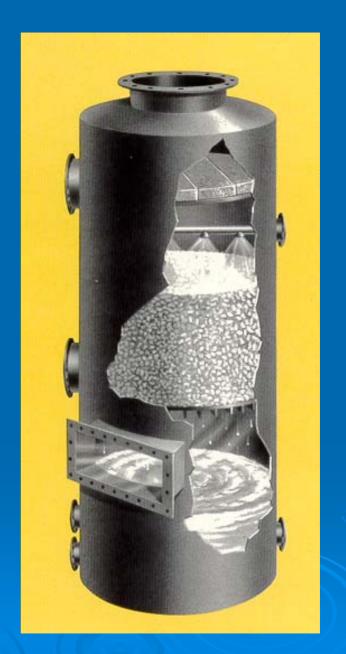


Figure 4-8. Typical activated carbon filter for odor control.

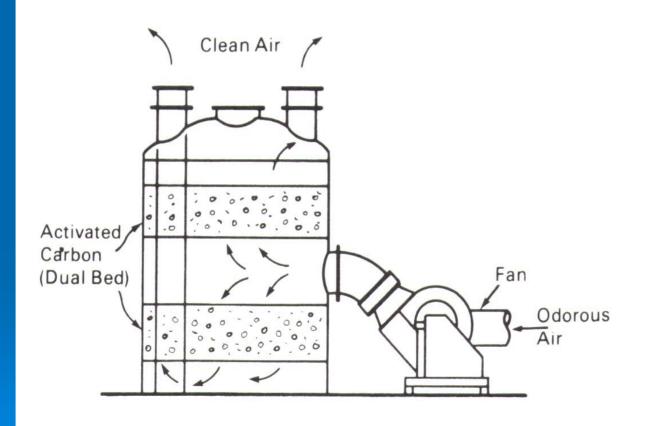
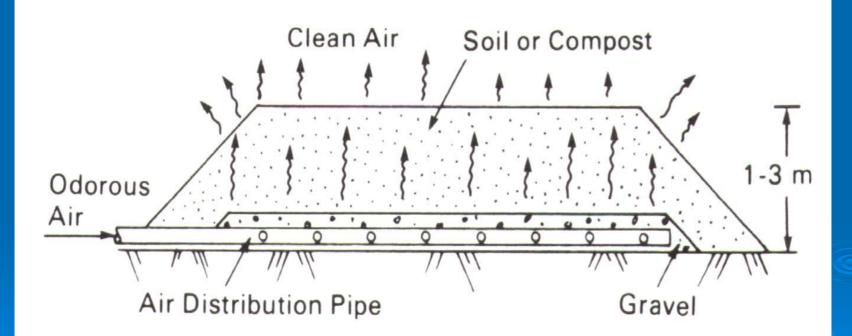
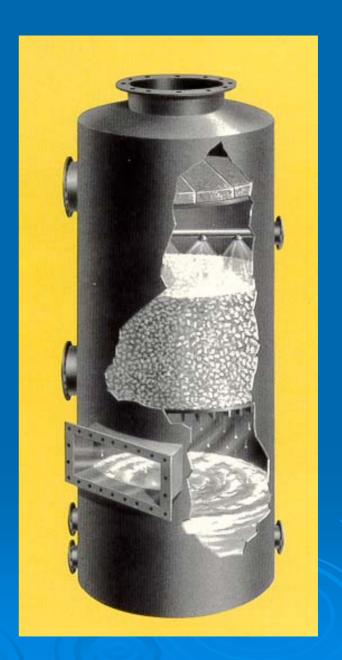


Figure 4-17. Soil/compost filter for odor control.





 Bioscrubber internals are very similar to those of the Wet Chemical Scrubber



South Treatment Plant

- First phase improvements in construction
- Covering and treating foul air from
 - First pass of each aeration basin
 - Return activated sludge (RAS) channel
- Chemical scrubber being added to treat foul air
 - Design includes new ducting and fan
- Chemical injection to control RAS odor & foam





South Treatment Plant

- Utilizing existing infrastructure for scrubber installation
 - Last plant upgrade included most of the structure & chemical storage systems necessary
- > Total project cost: ~\$7,000,000
- Construction Completed: 1st quarter 2008

